Applicant: Yoshiharu Hirakata et al. Attorney's Docket No.: 07977-275001 / US4910

Serial No.: 09/854,120 Filed: May 10, 2001

Page : 6 of 8

## REMARKS

Claims 1-4 and 6-14 are currently pending with claims 1-4 and 6-8 being independent. Claim 1 has been amended. Support for the amendment may be found in the application at, for example, Fig. 2 and paragraph [0070]-[0088] of the published application.

Applicants wish to thank Examiner Pompey for participating in a telephone interview with applicants' representative on August 25, 2006. The substance of the interview is incorporated into the following remarks.

Applicants acknowledge with appreciation the Examiner's allowance of claims 2-4, and the Examiner's indication that claims 9-14 are directed to allowable subject matter.

Independent claims 1 and 6 have been rejected as being anticipated by Mikami (U.S. Patent No. 6,115,017). Applicants respectfully traverse this rejection.

With respect to claim 1, applicants request reconsideration and withdrawal of this rejection because Mikami does not describe or suggest making liquid crystals <u>monostable</u> by applying an electric field between pixel electrodes and electrodes opposite to the pixel electrodes in such a manner that all of the pixel electrodes are given a fixed electric potential during a common time period, as recited in claim 1.

As discussed in the interview, a monostable liquid crystal may exhibit a transmittivity-versus-voltage characteristic similar to that shown in Fig. 24B of the application, where as voltages are applied to the monostable liquid crystal during operation of the display, the transmittivity of the monostable liquid crystal follows the curve shown in Fig. 24B.

In contrast, a liquid crystal exhibiting bistability or hysteresis may exhibit a transmittivity-versus voltage characteristic similar to that shown in Fig. 24A, where as voltages are applied to the bistable liquid crystal during operation of the display the transmittivity of the bistable liquid crystal follows the curve shown in Fig. 24A. Notably, the bistable liquid crystal, as shown in Fig. 24A, exhibits a memory property in that a transmittivity that results from application of a particular voltage may be any one of two different values depending on the past voltages that were applied to the liquid crystal. This memory property or hysteresis is often undesirable because it complicates the hardware and software required for high-speed operation

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Serial No.: 09/854,120 Filed: May 10, 2001

Page : 7 of 8

of a display and for realization of half-tones such as gray scale in a display. See pages 1-3 of the application.

While Mikami describes a display apparatus that uses liquid crystals, it is silent as to whether the liquid crystals in the display apparatus are monostable or bistable. While Mikami does describe applying voltages to a liquid crystal to change the transmittivity of the liquid crystal during operation of the display, such an application of voltage, as contemplated by Mikami, does not transform a liquid crystal that exhibits bistability or hysteresis characteristics, such as are shown in Fig. 24A, into a liquid crystal that exhibits monostable characteristics, such as are shown in Fig. 24B. Rather, the application of the voltage simply changes the transmittivity in accordance with, for example, the Fig. 24A characteristic if the liquid crystal is bistable or the Fig. 24B characteristic if the liquid crystal is monostable.

For at least these reasons, applicants request reconsideration and withdrawal of the rejection of claim 1.

With respect to claim 6, applicant requests reconsideration and withdrawal of the rejection because, as discussed above with respect to claim 1, Mikami does not describe or suggest applying an electric field to liquid crystals between first and second conductive films so that liquid crystals are made monostable, as recited in claim 6.

Independent claims 7 and 8 have been rejected as being unpatentable over Mikami in view of Sako (U.S. Patent No.6,108,061).

Like claim 6, each of claims 7 and 8 recites making liquid crystals monostable by an electric field applied to liquid crystals between first and second conductive film. Accordingly, applicant requests reconsideration and withdrawal of this rejection for the reasons discussed above with respect to claim 6 and because Sako, which is cited for the purpose of showing application of an ultraviolet ray to liquid crystals, does not remedy the failure of Mikami to describe or suggest the monostable aspect of the claim.

Applicant submits that all claims are in condition for allowance.

Applicant: Yoshiharu Hirakata et al.

Serial No.: 09/854,120 Filed: May 10, 2001

Page : 8 of 8

The fee in the amount of \$120 in payment for the Petition for Extension of Time fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Date

9/5/01

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Respectfully submitted,

Attorney's Docket No.: 07977-275001 / US4910

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